

**ABSTRACT OF THE DISCLOSURE**

Prokaryotic FAB I polypeptides and DNA (RNA) encoding such FAB I and a procedure for producing such polypeptides by recombinant techniques is disclosed. Also disclosed are methods for utilizing such FAB I for the treatment of infection, such as bacterial infections. Antagonists against such FAB I and their use as a therapeutic to treat infections, such as staphylococcal infections are also disclosed. Also disclosed are diagnostic assays for detecting diseases related to the presence of FAB I nucleic acid sequences and the polypeptides in a host. Also disclosed are diagnostic assays for detecting polynucleotides encoding FAB I and for detecting the polypeptide in a host.